

Title (en)
Inclination measuring instrument

Title (de)
Neigungsmesser

Title (fr)
Instrument de mesure d'inclinaison

Publication
EP 1233248 A3 20021204 (DE)

Application
EP 02002341 A 20020131

Priority
DE 10106728 A 20010214

Abstract (en)
[origin: DE10106728A1] Portable arrangement for determination of golf green geometry has an emitter for transmission of signals and a receiver for capture of the back scattered signals. The emitter transmits signals over a range or directions, while the receiver receives signals back from a range of directions. An analysis device determines slope geometry from time of flight differences in the received signals. The invention also relates to a method in which the device is used to determine the slope between a ball and hole on a golf green over a planned shot path. The signal can be radar or ultrasound based.

IPC 1-7
G01C 9/00; A63B 69/36; G01S 15/02; A63B 57/00

IPC 8 full level
A63B 57/00 (2015.01); **A63B 69/36** (2006.01); **G01C 9/00** (2006.01); **G01C 9/06** (2006.01); **G01S 15/02** (2006.01); **G01S 15/88** (2006.01)

CPC (source: EP US)
A63B 69/3676 (2013.01 - EP US); **G01C 9/06** (2013.01 - EP); **G01S 15/88** (2013.01 - EP); **A63B 57/40** (2015.10 - EP)

Citation (search report)

- [XY] DE 4336730 A1 19950504 - MARQUARDT GMBH [DE]
- [XY] US 2629082 A 19530217 - HARE DONALD G C
- [Y] US 4824114 A 19890425 - CATALANO GUY G [US]
- [Y] US 6095933 A 20000801 - SMITH DANIEL E [US]
- [Y] US 4082286 A 19780404 - LA BRECHE FERDINAND J
- [A] PATENT ABSTRACTS OF JAPAN vol. 013, no. 291 (P - 893) 6 July 1989 (1989-07-06)

Cited by
CN106974452A

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1233248 A2 20020821; EP 1233248 A3 20021204; EP 1233248 B1 20041006; AT E278931 T1 20041015; DE 10106728 A1 20020207;
DE 50201182 D1 20041111

DOCDB simple family (application)
EP 02002341 A 20020131; AT 02002341 T 20020131; DE 10106728 A 20010214; DE 50201182 T 20020131